

1 **ABSTRACT**

2 An extensible editor allows integration of extensions that modify the
3 editor's default behavior and provide customized feedback to users. The editor
4 includes interfaces through which extensions are connected to the editor and
5 through which selection services and highlight rendering services are provided.
6 The selection services interfaces provide a clear separation of a logical selection
7 position in the document and the visual feedback provided for the selection,
8 allowing extensions to be designed that provide customized selection feedback.
9 The highlight rendering services interfaces provide an extension with the ability to
10 augment an existing selection without modifying the actual document.

11 The editor also includes an event routing model that works to decrease the
12 occurrence of conflicts between the editor and extensions and between extensions.
13 Upon the occurrence of an event, the editor routes the event to each extension
14 before the editor's default handling of the event occurs. When an extension
15 responds to an event, the extension may "consume" the event by indicating to the
16 editor not to allow further processing of the event. After an event has been pre-
17 processed by each extension, the default editor acts on the event. The editor then
18 routes the event to each extension again, to allow each extension to process the
19 event after the default editor has acted. When the post-processing is completed,
20 each extension is notified of the actions taken by the editor and by each of the
21 other extensions.